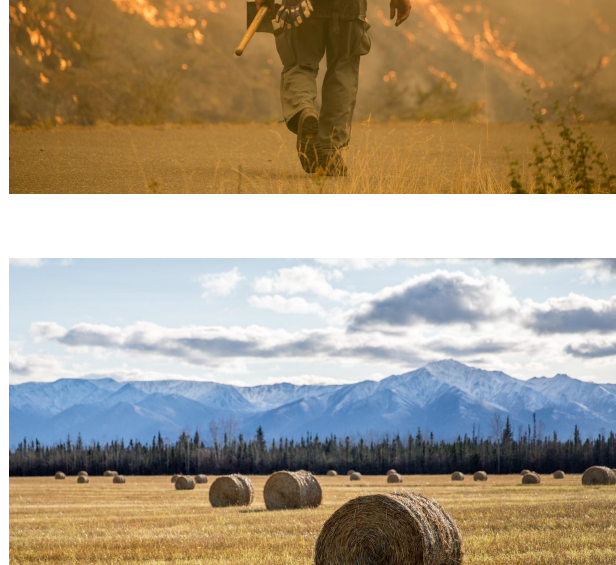
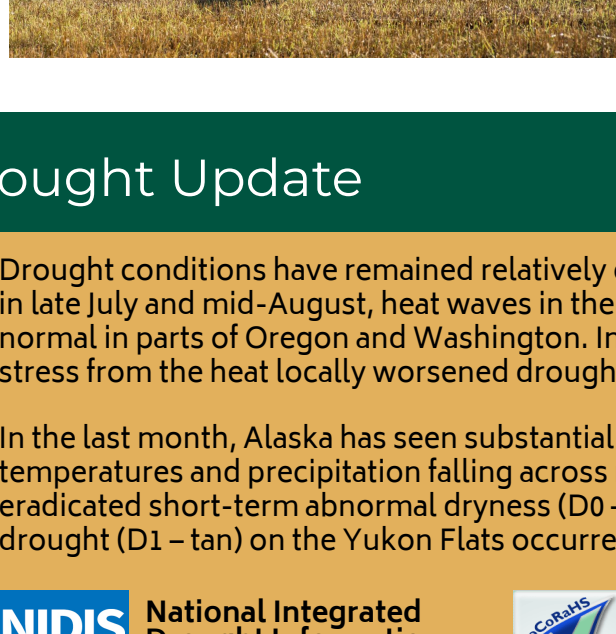


Featured Articles



Climate Change and Wildfire in Idaho, Oregon, and Washington

Large and severe fires in Idaho, Oregon, and Washington are associated with warm and dry conditions expected to intensify with climate change. The Northwest is likely to experience longer wildfire seasons, increased wildfire frequency, size, and total area burned, and possibly increased wildfire severity. Read more to learn about the relationship between climate change and wildfire in the Northwest.




Adaptation Resources for Agriculture: Responding to Changes in Climate in Alaska

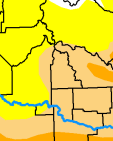
This workbook reviews climate change effects on agriculture in Alaska and provides information to help producers adapt their operations to a changing climate. Technology transfer specialists and producers can use this workbook to consider different strategies for increasing resilience to weather extremes, improving soil health, and addressing climate-related challenges.

Drought Update

Drought conditions have remained relatively consistent in Idaho, Oregon, and Washington. However, in late July and mid-August, heat waves in the Northwest pushed temperatures more than 9 °F above normal in parts of Oregon and Washington. In southeast and east-central Oregon, the evaporative stress from the heat locally worsened drought conditions.

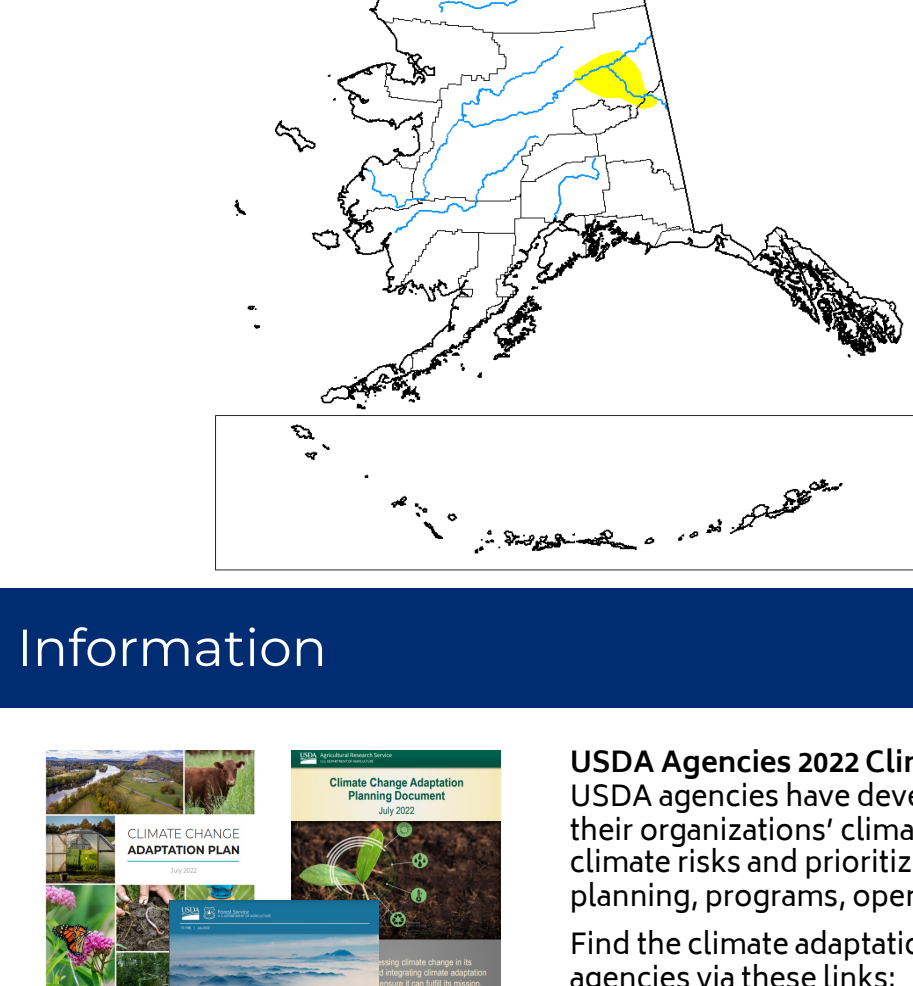
In the last month, Alaska has seen substantial improvement in drought conditions, with cooler temperatures and precipitation falling across much of the state. Central and southwest Alaska eradicated short-term abnormal dryness (D0 – yellow). A small southward shift in short-term moderate drought (D1 – tan) on the Yukon Flats occurred.

**National Integrated Drought Information System**

**CoCoRaHS Community Rain Hail Snow Network**

Condition Monitoring Observer Reports - Drought

U.S. Drought Monitor
USDA Northwest Climate Hub



August 16, 2022
(Released Thursday, Aug. 18, 2022)
Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4

Current	78.42	20.58	12.65	7.75	3.90	0.16
Last Week (08-09-2022)	80.42	19.58	12.45	7.82	3.95	0.16
3 Months Ago (06-17-2022)	74.37	25.63	21.00	14.50	6.19	1.56
Start of Calendar Year (01-01-2022)	74.10	25.90	23.70	15.00	6.81	2.01
Start of Water Year (09-01-2021)	70.14	29.86	27.67	24.87	18.54	7.83
One Year Ago (08-17-2021)	58.24	43.76	31.35	25.13	18.85	8.28

Intensity:
None D2 Severe Drought
D0 Abnormally Dry D3 Extreme Drought
D1 Moderate Drought D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:
Richard Tinker
CPC/NOAA/NWS/NCEP



droughtmonitor.unl.edu

Information



USDA Agencies 2022 Climate Adaptation Plans

USDA agencies have developed climate adaptation plans unique to their organizations' climate vulnerabilities. These plans identify climate risks and prioritize actions to integrate climate adaptation into planning, programs, operations, and management.

Find the climate adaptation plans of Northwest Climate Hub-affiliated agencies via these links:

- USDA Forest Service
- USDA Natural Resource Conservation Service
- USDA Agricultural Research Service



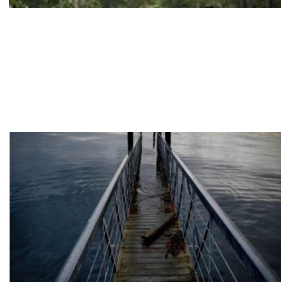
Northwest Forests and Woodlands

A new Northwest Climate Hub page explores the vast forests and woodlands of the Northwest and touches on how climate change could impact them.



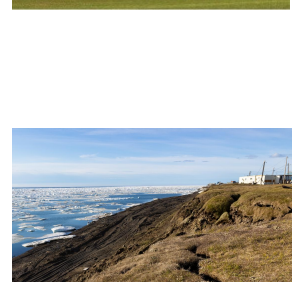
Forest Atlas of the United States

A new atlas from the Forest Service provides information about the value of our nation's forests and the challenges they face. It also includes a section on the future of forests and the carbon cycle.



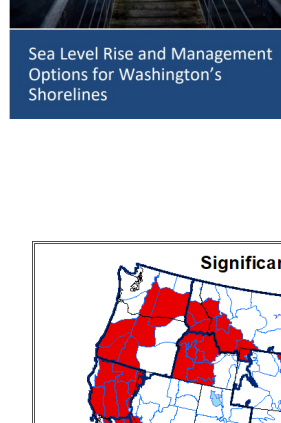
The Release of Heat.gov

The new National Integrated Heat Health Information System (NIHHS) website serves as a source of heat and health information for the nation to reduce the health, economic, and infrastructural impacts of extreme heat.



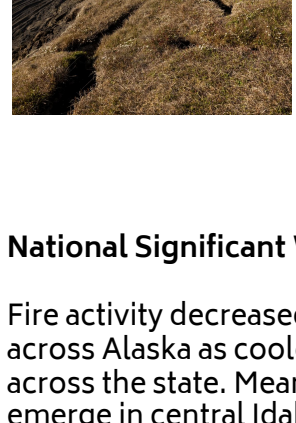
2021 Northwest Heat Dome: Causes, Impacts, and Future Outlook

A new Northwest Climate Hub page discusses the 2021 heat dome and how to prepare for a future in which events like this may be more common.



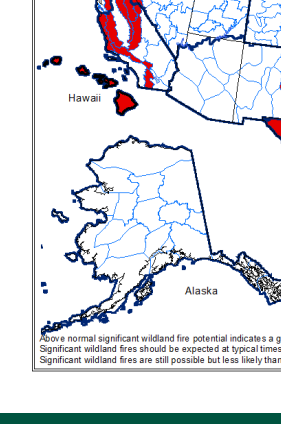
Fewer Food Options for Salmon Due to Snow and Glacier Loss in Alaska

Food available for fish will change as glacier- and snowmelt-dominated streams shift to rain dominated. This scientific article models how this shift will occur with climate change.



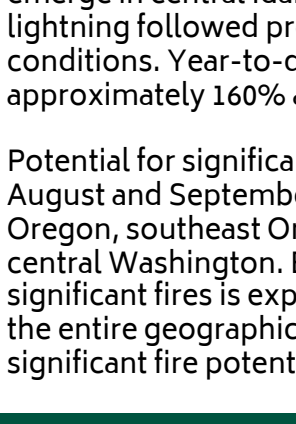
Washington 2022 Climate and Health Report

This report provides an overview of the connections between the climate crisis and health in Washington, including specific policy recommendations for how to respond to climate change while protecting people's health.



Sea Level Rise and Management Options for Washington's Shorelines

Climate change will worsen sea-level rise along Washington's coast. This report from Sea Grant Washington describes management options to reduce impacts.



Application Guide for the 2022 Sea Level Rise Technical Report

This report is designed to help decision-makers and coastal professionals apply and integrate the information in the 2022 Sea Level Rise Technical Report into local sea-level rise planning and adaptation planning.



National Significant Wildland Fire Potential Outlook

Fire activity decreased significantly in mid to late July across Alaska as cooler and wetter conditions spread across the state. Meanwhile, large fires began to emerge in central Idaho at the end of July when lightning followed prolonged hot and dry conditions. Year-to-date acres burned for the US is approximately 160% above the 10-year average.

Potential for significant fires in the Northwest during August and September is above normal in central Oregon, southeast Oregon, southwest Oregon, and central Washington. Elsewhere, the potential for significant fires is expected to be near-normal, with the entire geographic area returning to near normal significant fire potential in October and November.

Opportunity

ORISE Communications Fellowship with the Western Wildland Environmental Threat Assessment Center (WWETAC). The fellow selected will translate science and develop WWETAC communication materials, such as newsletters, briefing papers, web content, infographics, presentations, and webinars. The fellow will report to the director of WWETAC and will be mentored by a vibrant and dedicated team of WWETAC and associated Forest Service staff. This fellowship offers a unique opportunity to build skills in science delivery, public relations, communications, and outreach. **Applications due 27 September by 12 pm PT.**

Post-Doctoral Position in Boundary Spanning and Knowledge Co-Production for Community Climate Resilience The Alaska Center for Climate Assessment and Policy is seeking a highly innovative and energetic interdisciplinary scientist with interest and aptitude in bridging science and practice, partnerships between researchers and local knowledge, and/or actionable science to join their team. **Open until filled.**

Climate Conversations: Wildfire, 25 August, 12-1 pm PST. Climate change is increasing the frequency, severity, and area burned by wildfires in the U.S., putting people at risk of exposure to fire and to smoke, which can travel thousands of miles and affect the health of millions of people. Join the National Academies of Sciences for a conversation about how planners and decision-makers are coping with these challenges and working to protect the built environment and human health.

Climate Resilience Training for Oregon Ag Professionals, Wednesdays throughout October, 9:30-11:30 am PST. The Oregon Climate and Agricultural Network is putting on a series of virtual trainings that increase knowledge of technical service providers to support growers in their efforts to mitigate and adapt to climate change.



USGS and NOAA National Listening Session: Water Availability Prediction for Ecosystems, 8 September, 10 - 12:30 pm PST.

This webinar is designed to provide timely, regional information on current drought status and impacts. It will include a preview of current and developing climatic events and two specialty topic speakers. Specialty topics focus on management actions, latest tools, and research on snow, water, forestry, rangelands, or agriculture.

Climate Resilience Training for Oregon Ag Professionals, Wednesdays throughout October, 9:30-11:30 am PST. The Oregon Climate and Agricultural Network is putting on a series of virtual trainings that increase knowledge of technical service providers to support growers in their efforts to mitigate and adapt to climate change.

Workshops & Conferences

2022 Southeast Environmental Conference, 29 August-2 September, Juneau, AK. Every year, the Southeast Environmental Conference brings together Southeast Alaska tribes, natural resource professionals, agencies, and organizations within the region to learn and address common environmental priorities. Presenters speak Monday through Wednesday. Indigenous Guardians Network and Southeast Alaska Tribal Spear Research will host workshops Thursday and Friday.

Oregon Conservation Education and Assistance Network (OCEAN) CONNECT+, 6-8 September, Seaside, OR. This three-day, immersive conference will bring together local, state, and federal decision-makers, professionals from conservation districts, watershed councils, land trusts, and others committed to conserving natural resources. This conference advances Oregon's conservation efforts through diversity, equity, and inclusion of all people across the state.

AGU to Lead Development of an Ethical Framework for Climate Intervention, 8 and 25 September, different options listed below. The American Geophysical Union (AGU) is creating an ethical framework to guide the research and possible deployment of climate change intervention measures. To develop this framework, they are convening an advisory board to work in partnership with other global organizations. To join one of these conversations, to share your comment on AGU's proposal to lead the development of an ethical framework to guide the research and possible deployment of climate change intervention measures. Register or nominate yourself or others on their website.

18 August 4-6PM PST 8 September at 5-7 AM PST 8 September at 4-6 PM PST 25 September at 7 AM-1:30 PM PST (Virtual and in person in Washington D.C.)

10th Annual Rising Voices Workshop, 14-16 September, Virtual. The Rising Voices Center for Indigenous and Earth Sciences facilitates opportunities for Indigenous and non-Indigenous scientific experts and community leaders from around the world to jointly address how extreme weather and climate events are impacting communities, and to develop action plans. This year's workshop theme, "Emergent Knowledge through Indigenous and Earth Science Collaborations," will serve as a bridge to reflect on where Rising Voices has been in its first decade, and what emerges into the next decade. Registration information for this virtual workshop to come.

Reforestation Pipeline in the Western United States, 27-29 September, Missoula, MT. Large-scale reforestation is one proposed solution to mitigate the effects of climate change. This conference will be a place to discuss the potential challenges to reforestation in the western United States. This is a joint annual meeting for the Western Forest and Conservation Nursery Association, Intertribal Nursery Council, and Intermountain Container Seedling Growers' Association.

Pacific Northwest Drought and Human Health Workshop, October 19-20, 2022, Portland, OR. The Pacific Northwest Drought and Human Health Workshop is tailored to regional drought-related human health impacts and will help identify gaps and needs, collaborative opportunities, and ways to integrate the health sector into existing drought activities. The audience for this workshop will be state and local public health departments, climate scientists, emergency managers, Tribal communities, and healthcare providers.

National Adaptation Forum, 25-27 October, Baltimore, MD. The National Adaptation Forum provides an opportunity for attendees to make their work climate informed, share what they have learned with others, and explore innovative adaptation approaches. It is a professional development event that aims to expand the network of all attendees striving to be climate informed. The 5th National Adaptation Forum will continue to bring together individuals from a wide spectrum of sectors and regions integrating climate adaptation planning into their day-to-day activities.

Annual SageCon Summit 2-3 November, Burns, OR and online. SageCon is an opportunity for local, state, and federal partners to work towards resilient rangelands in southeastern Oregon and across the Great Basin. The summit will include discussions on the status and trends of sage grouse populations in Oregon, and strategies for addressing invasive annual grasses in the region.

Funding Opportunities

Composting and Food Waste Reduction (CFWR) Pilot Project. Uneaten food contributes approximately 4% of greenhouse gas emissions in the United States. To reduce these emissions, the Natural Resources Conservation Service is soliciting applications from eligible applicants to host a CFWR pilot project. Projects are intended to help carry out planning and implementation of activities that will generate compost, increase access to compost for agricultural producers, reduce reliance on (and limit the use of) fertilizer, improve soil quality, encourage waste management and permaculture business development, increase rainwater absorption, reduce municipal food waste, and divert food waste from landfills. **Applications due by 1 September.**

Transformational Habitat Restoration and Coastal Resilience. This grant is for restoration projects that restore marine, estuarine, coastal, or Great Lakes ecosystems using approaches that enhance community and ecosystem resilience to climate hazards. Funding will prioritize habitat restoration actions that: demonstrate significant impacts; rebuild productive and sustainable fisheries; contribute to the recovery and conservation of threatened and endangered species; promote climate-resilient ecosystems, especially in Tribal or underserved communities; and improve economic vitality, including local employment. **Applications due by 6 September.**

Environmental Justice Data Grants. These grants, funded by Google, aim to aid frontline communities that have been historically underserved and disproportionately impacted by climate change and environmental injustice. The fund will enable frontline communities to use data to unlock resources, increase their access to Justice40 benefits and federal infrastructure funding, and advocate for new policies that empower communities to address past environmental harm and pave the way to a climate-resilient future. Grants are available for smaller-scale or early-stage data projects, including organizational capacity building for data work. **Applications due by 16 September.**

On Farm Conservation Innovation Trials. Trials help to stimulate the adoption and evaluation of innovative conservation approaches in partnership with agricultural producers. Applications will be accepted from eligible entities for projects addressing at least one of the following priorities: irrigation management technologies; climate-smart agricultural solutions; nutrient management; and soil health demonstration trials. On-Farm Trials projects may be between 3 and 5 years in duration. **Applications due by 22 September.**

Grazing Lands Conservation Initiative Grants. This program expands access to conservation technical assistance for livestock producers and increases the use of conservation practices on grazing lands. Projects must address local natural resource concerns, use climate-smart agriculture and forestry practices, encourage partnerships for advancing the resource needs of underserved communities, or identify and implement strategies to measure and report conservation benefits associated with grazing management systems. **Applications due by 22 September.**

USDA Increases Funding for Partnerships to Safeguard, Restore Wetland Ecosystems. The U.S. Department of Agriculture (USDA) is investing to help conservation partners protect and restore critical wetlands through the Wetland Reserve Enhancement Partnership. In the face of climate change, wetlands can reduce impacts by improving water quality, mitigating flood impacts, and enhancing wildlife habitat. USDA's Natural Resources Conservation Service is prioritizing proposals that support efforts to mitigate climate change by restoring wetlands while also prioritizing assistance to underserved communities. **Applications due by 23 September.**

Partners for Fish and Wildlife Program. This is a voluntary, incentive-based program that provides direct technical and financial assistance to private landowners to restore and conserve fish and wildlife habitat for the benefit of federal trust resources. Project work plans are developed strategically, in coordination with partners, and with substantial involvement from U.S. Fish and Wildlife field staff. Program strategic plans inform the types of projects funded by this program. **Applications due by 30 September.**

Coastal Habitat Restoration and Resilience Grants for Underserved Communities. Coastal resiliency will be crucial to protecting communities that will be threatened by sea-level rise with climate change. The National Oceanic and Atmospheric Administration is providing \$10 million for opportunities for underserved communities, Tribes, and/or Tribal entities to engage in coastal habitat restoration activities. These funds will help enhance resilience of underserved communities in marine, estuarine, coastal, and Great Lakes areas. **Applications due by 30 September.**

Community Wildfire Defense Grant Program. These grants are intended to help at-risk local communities and Tribes plan and reduce the risks of wildfires. Priority will be given to at-risk communities in areas identified as having high or very high wildfire hazard potential, low income, and/or areas that have been impacted by a severe disaster. Grants will be funded for the development and revision of Community Wildfire Protection Plans and the implementation of projects described in a Community Wildfire Protection Plan that is less than ten years old. **Applications due 7 October.**

Conservation Innovation Grants (CIG) Classic Program. CIG supports the development of new tools, approaches, practices, and technologies to further natural resource conservation on private lands. CIG partners work to address our nation's water quality, air quality, soil health and wildlife habitat challenges, while improving agricultural operations. Projects should stimulate the development and adoption of innovative conservation approaches and technologies in conjunction with agricultural production and may be between 1 and 3 years in duration. **Applications due 11 October.**

USDA Accepting Applications to Help Cover Costs of Organic, Transitioning Producers. Transitioning to organic farming may be one way for farmers to combat the climate crisis. Organic farming can help with carbon storage by improving soil health. This fund will help farmers cover fees associated with organic certification. **Applications due 31 October.**

Foundational and Applied Science Program. The USDA Agriculture and Food Research Initiative supports grants in six priority areas to advance knowledge in fundamental and applied sciences important to agriculture. The six priority areas are: Plant Health and Production and Plant Products; Animal Health and Production and Animal Products; Food Safety, Nutrition, and Health; Bioenergy, Natural Resources, and Environment; Agriculture Systems and Technology; and Agriculture Economics and Rural Communities. Research-only, extension-only, and integrated research, education and/or extension projects are solicited. **Applications due by 31 December.**

